

**INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY
(SUPPLEMENT)**

International File Reference
PCT/CH2005/000116

Re. Point V

Justified statement regarding the novelty, inventive activity and commercial applicability: documents and declarations in support of this statement

1. Reference is made to the following documents:
D1: DE 19 17 972 A1 (SCHULTZ, ROLF) 6 November 1969
(6.11.1969)
D2: EP-A-0 141 907 (FREDERIC WEISSHEIMER MALZFABRIK)
22 May
1985 (22.5.1985)
D3: DE 16 42 651 A1 (RHEINSTAHL AG MASCHINENBAU;
RHEINSTAHL AG
MASCHINENBAU, 4100 DUISBURG) 26 October 1972
(26.10.1972)
D4: DE 15 17 789 A1 (VICKERS LTD) 11 December 1969
(11.12.1969)
2. The following statements relate to Claims 1-29 submitted in printed form with the letter dated 29.06.2005.
An examination of secondary applications generally and of combined claims in the present case (see the references in the final paragraphs of the letter mentioned) is not provided for in these PCT proceedings and cannot therefore be undertaken.
3. The arguments put forward in the letter of 29.06.2005 regarding the differentiation of the disclosures of documents D1-D4 from the object of this application have been carefully studied. Although the statements of the applicant are understandable and correct, in our opinion, Claim 1 must be considered not to be clearly demarcated from the state of the art.
Particular consideration must be given here to the fact that the terms "water line system" and "passageway" allow a relatively broad

interpretation. To this extent a "continuous larger cavity" (see the letter of 29.06.05, p. 2, lines 6 & 7) may be considered a "water line network" and a germinating floor perforation may be considered a "passageway".

4. The general impression is given that Claim 1 has not been sufficiently specified or restricted for novelty to be attested on the basis of the characteristics essential for this invention and bringing improvements relative to the state of the art.
5. This application fails to meet the requirements laid down in Article 33(1) PCT because the object of Claims 1-3 and 19 are not novel within the meaning of Article 33(2) PCT.
 - 5.1. Document D1 discloses (see p. 7, § 4 – p. 11, § 1; para. 1 and 3) a device for steeping barley, comprising a container for the barley to be steeped, with a perforated floor.
Air lines (3) for aerating the barley from bottom to top and water lines (25) for supplying the barley to be steeped from bottom to top and its branch from top to bottom are connected directly to the perforated floor (2).
The object of Claims 1-3 and 19 are not novel, therefore (Article 33(2) PCT).
 - 5.2. Document D2 discloses (see p. 14, line 16 – p. 15, line 22; Fig. 3) a device for steeping barley, comprising a container for barley to be steeped, with a perforated floor (72).
Water lines (68, 70) for supplying the steeping water from bottom to top, and its branch from top to bottom, are directly connected to the perforated floor (72). Moreover, air lines are implicitly provided with which tempered air is forced into germinated material 74".
The object of Claims 1-3 and 19 is not new, therefore (Article 33(2) PCT).
 - 5.3. Document D3 discloses (see p. 3, line 6 – p. 5, § 2; figures) a device for steeping barley, comprising a container for barley to be steeped, with a perforated floor (4).

Water lines (10, 11, 14, 15) for supplying the steeping water from bottom to top through the grain layer and its branch from top to bottom are directly connected to the perforated floor (4).

The object of Claims 1-3 is not novel, therefore (Article 33(2) (PCT)).

- 5.4. Document D4 discloses (see p. 12, § 3; para. 2-4; Claim 1) a device for steeping barley, comprising a container for barley to be steeped, with a perforated floor (9).

A water line (17) for supplying the steeping water from bottom to top through the grain layer and its branch from top to bottom is directly connected to the perforated floor (9).

Moreover, air lines (14, 15) are provided with which "climatised air" is admitted "vertically through the blind floor upwards into the space above the barley".

The object of Claims 1-3 and 19 are not novel, therefore (Article 33(2) PCT).

6. The dependent Claims 4-18 and 20-29 contain no characteristics which, combined with the characteristics of any claim to which they relate, meet the requirements of the PCT regarding inventive activity. The grounds for this are as follows:

The dependent Claims 4-18 and 20-29 relate to minor modifications of the device according to Claim 1, which lie within its framework, which is normally assumed by an expert on the basis of the considerations with which he is familiar, particularly as the advantages achieved thereby can easily be overlooked. Consequently the object of Claims 4-18 and 20-29 are not based on inventive activity either.

CLAIMS

1. A device for steeping barley, comprising a container for barley to be steeped, with a floor in which passageways are provided for passing water between the underside of the floor and the barley to be steeped in the container, characterised in that a water line system (13) is directly connected to passageways (6) for feeding water and/or gases through these passageways (6).
2. The device according to Claim 1, characterised in that the water line system is suitable for discharging water from the barley (5) to be steeped through the passageways (6).
3. The device according to Claim 1 or Claim 2, characterised in that the water line system is set up in such a manner that it supplies water to the barley (5) to be steeped through the passageways(6) starting from the underside of the floor (4).
4. The device according to Claim 1, 2 or 3, characterised in that the passageways (6) are provided with sieves (8).
5. The device according to Claim 1 to 4, characterised in that the container (2) has a round shape when viewed from above, wherein the passageways (6) are arranged in radially orientated rows (7, 7a, 7b).
6. The device according to Claim 5, characterised in that adjacent radially orientated rows (7, 7a, 7b) have a varying length.

7. The device according to any one of the preceding claims, characterised in that the water line system is provided under the floor (4) with a number of shared water line elements and water
8. branch line elements between a shared water line element and a passageway (6).
9. The device according to claim 5 or 6 and according to claim 7, characterised in that the shared water line elements are radially orientated.
9. The device according to claim 8, characterised in that the shared water line elements are oriented between two adjacent, radially oriented rows (7) of passageways (6) when viewed from above.
10. The device according to any one of claims 7 to 9, characterised in that a number of shared water line elements are connected to a water main line element.
11. The device according to any one of the preceding claims, characterised in that a reservoir is provided for cleaning agents, which is connected by a cleaning agent shutoff mechanism connected to the water line system to supply cleaning agent to the water line system.
12. The device according to any one of the preceding claims, characterised in that a CO₂ line system is connected under the floor (4) directly to passageways (6) for removing CO₂ from the barley (5) to be steeped through these passageways (6).
13. The device according to claim 12, characterised in that the CO₂ line system is provided under the floor (4) with a number of shared CO₂ line elements (16) and CO₂ branch line elements between a shared CO₂ line element (16) and a passageway (6).

14. The device according to claim 13, characterised in that a number of shared CO₂ line elements are connected to a CO₂ main line element.
15. The device according to claim 6 or a dependent claim and according to 13 or a dependent claim, characterised in that the shared water line elements and shared CO₂ line elements are formed at least in part by the same shared line elements.
16. The device according to claim 6 or a dependent claim and according to 13 or a dependent claim, characterised in that the water branch line elements and the CO₂ branch line elements are formed at least in part by the same branch line elements.
17. The device according to claim 9 or a dependent claim and according to 15 or a dependent claim, characterised in that water shutoff valves (19, 20, 21) are provided between the shared line elements and the water main line element.
18. The device according to claim 14 or a dependent claim and according to 15 or a dependent claim, characterised in that CO₂ shutoff mechanisms (22) are provided between the shared line elements and the CO₂ main line element.
19. The device according to any one of the preceding claims, characterised in that an air line system is connected under the floor (4) to passageways (6) in order to pass air to the barley (5) to be steeped through these passageways (6).
20. The device according to claim 19, characterised in that the air line system is provided with a number of shared air line elements and air branch line elements between a shared air line element and a passageway (6), preferably under the floor (4).

21. The device according to claim 20, characterised in that a number of shared air line elements is connected to an air main line element (14).
22. The device according to claim 21, characterised in that air valves (23) are provided between the shared air line elements and the air main line element (14).
23. The device according to claim 22, characterised in that a control system is provided that is suitable for the individual or group operation of various air shutoff valves (23).
24. The device according to any one of the preceding claims, characterised in that the container (2) is provided near its upper side with a scraper in order to scrape or collect elements circulating on the water as the scraper body (30) shifts in a displacement direction along the surface of the water.
25. The device according to claim 23 and claim 24, characterised in that the control system is suitable for opening one or a plurality of air shutoff valves (23) that are located on the front side of the scraper body (30) viewed from above in the displacement direction.
26. The device according to at least any one of claims 1 to 25, characterised in that the floor (4) has a partially open, gas-permeable surface constituting less than 5% of the overall surface.
27. The device according to at least one of claims 1 to 26, characterised in that the percentage of open surface measures less than 3%.
28. The device according to at least any one of claims 1 to 27, characterised in that the line systems are stepped.

29. The device according to at least any one of claims 1 to 28, characterised in that the line systems are routed to the outside at or under floor (4) level.